

Trinity Episcopal Church
Groton, South Dakota



Roof Replacement
2018

Tax-deductible donations may be sent to
Groton Community Historical Society
PO Box 373, Groton, SD 57445

Trinity Episcopal Church

3rd Street at 3rd Avenue
Groton, South Dakota

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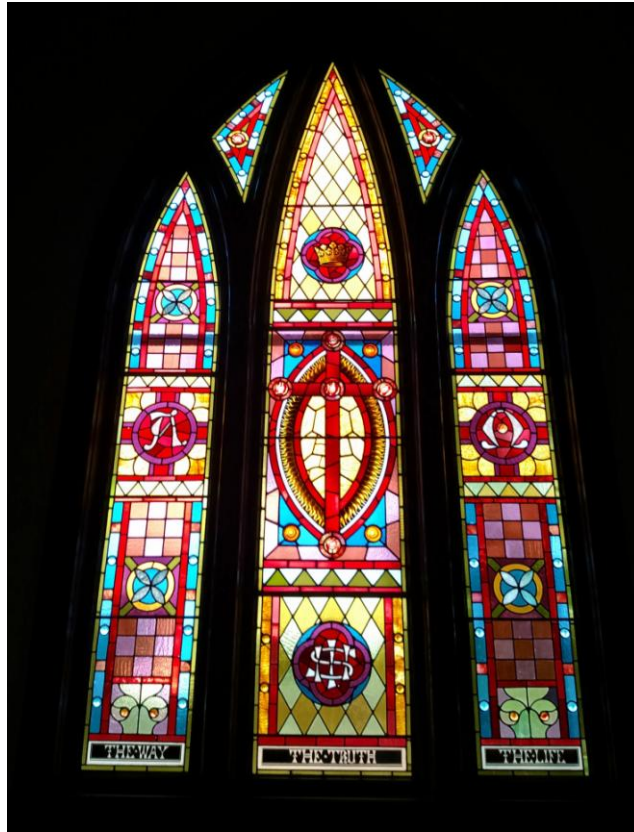
Bibliography

Special Thanks to the following people:

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Introduction



Trinity Episcopal Church has been a historic landmark in Groton since it was built in 1884. It was the first church in Groton, and is the oldest historic monument in town.

The focal feature of this building is a large stained and painted glass arched window with wooden tracery that creates three lancet shapes behind the altar. This window was completely restored in 2016 with the assistance of a SD Historic Preservation Grant from the Deadwood Fund, matched by the Brown County Historical Society.

The purpose of this study is to assess the damage to the roof of this 134-year-old structure and provide a solution to render it capable of protecting the interior of this unique historic monument. The repairs recommended in this report will respect the historic character of the building. The following needs have been identified:

1. The existing asphalt shingles need to be removed
2. The condition of the underlying roof boards (which also serve as the interior ceiling) and rafters needs to be ascertained
3. Rotted rafters and roof/ceiling boards need to be removed and replaced (after ceiling side is stained brown to match existing ceiling)
4. New asphalt shingles need to be installed
5. Facia boards and other adjoining boards need to be painted
6. The gigantic tree on the north side of the church needs to be trimmed or removed to prevent future damage to the roof

History



Photo courtesy of South Dakota State Historical Society

Trinity Episcopal Church was built by the congregation as a place of worship and a center for residents of the newly formed town of Groton to come together and gather as a community. The cost of the building was \$1,200. Construction started July 1, 1883, and was completed June 30, 1884.

Several denominations held services in the church. The last services before the recent resurgence of interest in the church were held there in the late 1960's.

The church was consecrated in the Episcopal Diocese of South Dakota until the Diocese deeded the property to the Brown County Historical Society in 1975. The Church was placed on the National Register of Historic Places in 1983. In 2016, the Groton Community Historical Society was formed for the express purpose of assuming ownership of the church, and maintaining and preserving it.

The church is exactly as it was in the 1880's except for an oil floor furnace (now removed), chimney and turn-of-the-century wiring.

The caption of this undated photo states: "The building is shaded by leafy deciduous trees in a park setting." The city grew up around the church, and by 1932, a house was constructed on the adjacent lot to the south. The church is now in a historic residential area close to downtown.

Architecture



PERSPECTIVE VIEW OF WOODEN CHAPEL.

Architecturally, Trinity Episcopal Church is typical of the size, materials and style of architecture seen in many Midwestern country churches erected in the 1880's when the area was being settled.

The church was built after the pattern entitled "Wooden Chapel", published in Richard Upjohn's Rural Architecture. (See next page.) It is constructed of frame resting on stone and concrete foundation. The church is one story in height with the gable roof sloping down to meet the window tops. The double front doors are enclosed in a 12-foot-tall Gothic arch. The interior has stained and grained wood throughout, including the wooden truss ceiling. The exterior is board and batten.

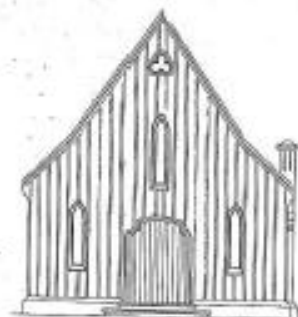
Richard Upjohn was a British-born American architect who became most famous for his Gothic Revival churches such as the elaborate and expensive Trinity Church on Wall Street in lower Manhattan. Prompted by more requests than he could satisfy to design small churches for poor congregations, the socially-conscious Upjohn published his book on rural architecture in 1852. His designs for modest but intensely "church-like" Gothic Revival churches typically featured steep roofs, board and batten walls, and narrow pointed windows, all of which are exemplified in Trinity Episcopal Church. His designs were suited to the skills and materials of local builders. As he intended, his designs were replicated and adapted across much of the country for many years.

Groton's Trinity Episcopal Church is the single remaining example of a rural board-and-batten Episcopal Church of Upjohn's design in the state of South Dakota. A South Dakota State Historical Society publication, Building South Dakota, labeled it "**The Lone Survivor**" of 153 similar Episcopal Churches scattered throughout the state in 1890.



Rear Elevation.

Upjohn's Rural Architecture.



Front Elevation.

DESIGNS, WORKING DRAWINGS AND SPECIFICATIONS

FOR A

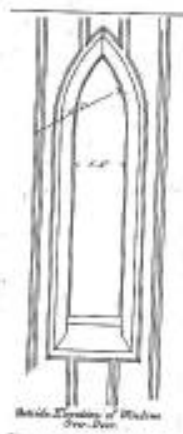
WOODEN CHURCH, AND OTHER RURAL STRUCTURES.

BY RICHARD UPJOHN, ARCHITECT.

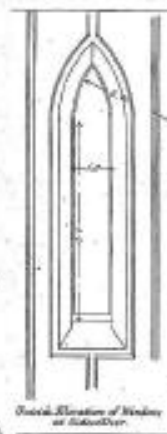
New-York:

GEORGE P. PUTNAM, 10 PARK PLACE.

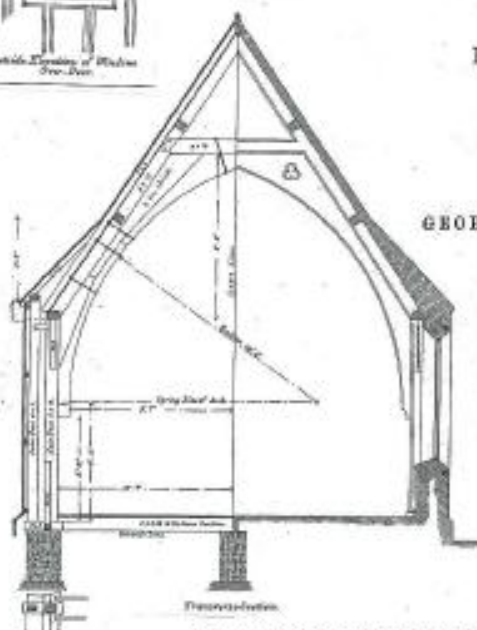
1868.



Detail Elevation of Window
over Door.



Detail Elevation of Window
at Side Door.



Perspective View.



PREFACE



Half Elevation of framing of front Gable. Half Elevation of framing of rear Gable.

My purpose in publishing this book is simply to supply the want which is often felt, especially in the newly settled parts of our country, of designs for cheap but still substantial buildings for the use of parishes, schools, etc....A perspective view is given of each design, with general plans, and full working drawings and specifications. Bills of timber and lumber are also added for the Church and Chapel. With these, any intelligent mechanic will be able to carry out the design.

RICHARD UPJOHN.

Significance of Church

Trinity Episcopal Church is historically and architecturally significant because it is the last-remaining example in South Dakota of frontier churches built using designs of a famous American architect who ultimately left his stamp on churches in every part of the United States.

Richard Upjohn was a cabinetmaker in Britain. When he immigrated to the United States in 1829, he apprenticed himself to an architect in Boston, later moving to New York City, and became one of America's most famous architects. He founded the American Institute of Architects and served as its president for 19 years. His early fame resulted from his masterpiece, Trinity Church in New York City, built 1839-46, one of the most famous monuments of modern Gothic art, establishing him as a leading American architect.



Richard Upjohn oil portrait circa 1870

Upjohn was part of a small group of East Coast Episcopalian church architects whose missionary zeal and vision linked the American frontier to the East. In the 1830's they turned their attention to the American West, vying with other denominations to build the first church in a new settlement. The first church in town garnered a certain prestige that helped the congregation attract the undecided of the community.

Even missionary bishops who oversaw frontier districts not yet organized into dioceses often brought a copy of Upjohn's Rural Architecture with them for local parishioners and clergy to study for inspiration and detailed plans. The bishops would often scout out good locations in early settlements even before a congregation was formed.

Upjohn adapted the board-and-batten style of the fashionable English cottage to church architecture, and made that style widely popular throughout the country for smaller wooden churches. This vertical siding became the hallmark of Upjohn's Episcopal churches, differentiating them from the similar form of other churches. It was Upjohn who was largely responsible for the popularity of the Gothic Revival style for smaller churches. Upjohn's plans fit nicely with the needs of early Midwestern parishes. The buildings were plain, with little ornamentation. Most congregations simply adopted the Upjohn plans; some modified them. The Groton congregation added a gabled entry way, and did not include the side chimney and roof "wing" found in Upjohn's plans.

As congregations grew in size and resources, many hastily-built “first churches” were torn down to make room for larger, more accommodating “second churches”. Others were abandoned, left to deteriorate in the elements, to burn down, to be sold to other congregations, or to be converted to other uses. Eventually, the other 152 Upjohn-design churches in South Dakota succumbed to one of these fates, leaving only the historic Groton Trinity Church still standing.

Neither the Diocese nor the parishes recognized the value of their Gothic buildings. All they saw were out-of-date, run-down, hard-to-heat frame buildings, as one was described, “an old building none too warm, none too neat or attractive”.

After 1890, new styles of architecture began to compete with the Gothic Revival style of Upjohn. At that time, when many of the “second churches” were being constructed in South Dakota, ecclesiastical architecture was changing. Larger, more affluent congregations were able to hire architects to design more elaborate stone structures with towers, large social halls, Sunday School rooms and basements to accommodate denominational worship practices and ethnic preferences

Not until the growth of the historic preservation movement in the 1970’s would the architectural heritage brought to the frontier by the Episcopalians be recognized. Only one of these small, graceful legacies of pioneer faith and enterprise has survived in South Dakota to tell their stories to a more appreciative audience.

Architectural historians consider the New York City Trinity Church (once the tallest building in the city) designed by Richard Upjohn to be the finest example of Gothic Revival architecture. Its famous architect also designed the Groton Trinity Episcopal Church, which is the last remaining example of his Gothic Revival church architecture in the entire state of South Dakota.

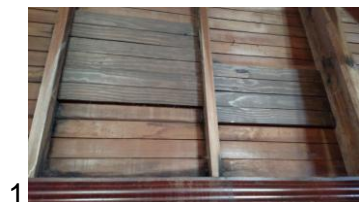
Groton’s Historic Trinity Episcopal Church needs a new roof to protect and preserve the entire structure, its hand-hewn furnishings and beautiful stained glass windows.

A new roof will ensure that this last example of the architectural heritage of the frontier Rural Gothic Revival churches in South Dakota continues to survive into the future.



Bird's eye view of Trinity Church NY 1846

Condition of Roof



1



2



3



4



5



6

Trinity Episcopal Church is in dire need of a new roof to preserve the entire structure, its historic interior, its hand-hewn furnishings and beautiful stained glass windows. It was last roofed by the Brown County Historical Society ("BCHS") shortly after the Society acquired it in 1975. The contractor who roofed it for BCHS recently advised that there was damage to the north roof at that time, but he was directed to roof over the top of the damaged area instead of "tearing into it", to avoid incurring additional expense.

In the intervening 42 years, water has seeped through the roof, leaving white spots on the ceiling below since the roofing boards also form the interior ceiling. New 1 x 4 pieces of wood were nailed between the rafters on the underside of the rotted roofing boards. (See photo 1) The roofing boards continued to deteriorate, but the deterioration was not visible from below. The sill boards below the tacked-on 1 x 4's show damage from water leaking underneath the added boards. (See photo 2)

The "wavy" appearance of the North roof today indicates the extent of deterioration of the underlying roof boards. (See photo 3 and next page) It will not be possible for workers to stand directly on the roof because of the danger of falling through it.

GCHS volunteers trimming low-hanging branches from the North roof during the summer of 2017 discovered a hole about four inches in diameter, obviously caused by tree branches rubbing on the roof. (See photo 4) In order to protect and preserve the newly-installed roof, it will be necessary to trim or remove the huge tree overhanging the North side of the church.

The South side of the roof has numerous missing shingles because strong winds have blown them off. The remaining shingles are curling and the tarpaper beneath is buckling. (See photo 5 and next page) White spots on the rafters below indicate water damage from missing shingles. (See photo 6)



South Roof



North Roof

Estimate



Roofing contractors will be asked to submit cost estimates based on the following specifications, with work to be done in compliance with the Standards of the Secretary of Interior:

- Remove existing shingles
- Remove rotted roofing boards
- Replace or reinforce any rotted rafters
- Stain underside of new roofing boards
- Install new roofing boards
- Install new shingles
- Repair wood trim and fascia as needed
- Paint wood trim and fascia boards

Tree trimmers will be asked to submit cost estimates for removing or trimming the gigantic tree north of the church, especially any branches that lean over the roof.

A preliminary estimate by a knowledgeable local contractor indicates a probable total cost of around \$45,000 to \$50,000, including tree trimming and materials (asphalt shingles).. Wooden-look composite shingles were priced in hopes of imitating the original wood shakes, but were found to be 5 times as expensive as asphalt shingles.

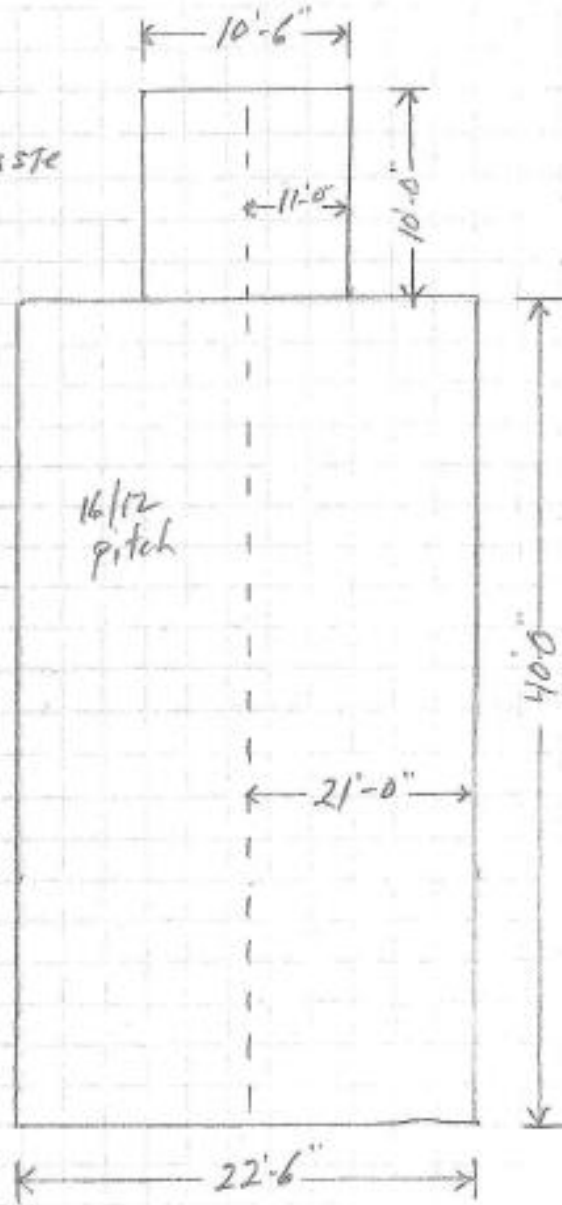
The final cost estimate will be based upon the estimates submitted by roofing contractors and tree trimmers, plus a contingency fund for repair of unforeseeable damage, and a \$50 permit fee. Volunteers will provide in-kind work by helping with removal and disposal of old shingles, staining ceiling side of new roofing boards, painting exterior woodwork and hauling away tree branches.

Drawing

$$42' \times 21' \times 2 = 1764$$

$$11' \times 11' \times 2 = 242$$

2006 plus waste



Roof 5500
Eagle View

Conclusion and Recommendations



Photo courtesy of Robert Hill

Trinity Episcopal Church is a rich piece of history for Groton, Brown County and South Dakota. Its style and craftsmanship make a powerful statement about the people who settled this area. They took time from “proving up” their land, planting crops, and cultivating tree claims to build a place of worship and fellowship. They donated hard-earned money to have stained glass windows custom made in Connecticut. They carved beautiful ecclesiastical furnishings with their own hands, using Upjohn’s designs. Their pioneering spirit lives on in this church. The roof of this last-remaining Upjohn-design church in South Dakota needs to be replaced to preserve the interior, the hand-hewn furnishings and the beautiful stained glass windows so that the church can be enjoyed and appreciated by many more generations to come.

The old shingles need to be removed. Rafters need to be inspected and repaired if necessary. Rotted roofing boards need to be removed and replaced. New roofing boards need to be stained on the underside to match the existing ceiling, then installed. New, long-lasting shingles need to be installed. Trim and fascia boards need to be scraped and painted. The gigantic tree north of the church needs to be trimmed or removed to prevent future damage to the new roof.

A new roof on this historic prairie church will ensure that it and its beautiful interior and furnishings will continue to be “the lone survivor” of the 153 similar churches found throughout South Dakota in the 1890’s. A new roof will prevent it from falling into disrepair and eventual deterioration. It has survived 134 years, outlasting all its contemporaries, and with a new roof it will continue to survive into the future.

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Gunderson, Joan R., "Rural Gothic: Episcopal Churches on the Minnesota Frontier", Minnesota History (St. Paul: Minnesota Historical Society, Fall 1987) pp 258-68.

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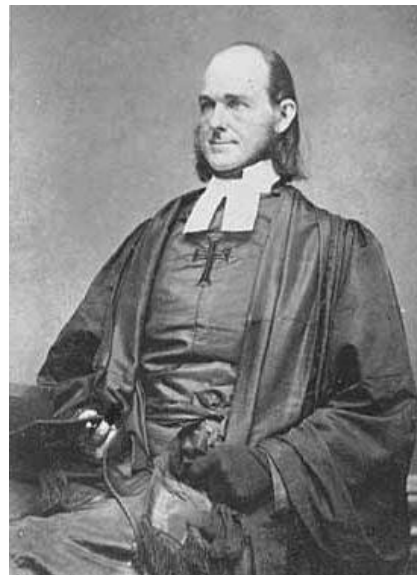
Kidd, Daniel, Midwest Church Architecture: Upjohn's Influence. This source was quoted in several places but the book itself could not be located on the internet or at the Mikkelsen Library, Augustana University, or through the SD Interlibrary Loan System. Attempts to contact a young architect named Daniel Kidd in NYC produced no results.

Upjohn, Everard M., Richard Upjohn, Architect and Churchman (New York: Columbia University Press, 1939).

Upjohn, Richard, Upjohn's Rural Architecture: Designs, Working Drawings and Specifications for a Wooden Church and other Rural Structures (New York, George P. Putnam, 1852). Re-printed by DaCapo Press, New York, 1975.



Grant Writer Betty Breck was delighted to find a copy of the 1975 reproduction of Upjohn's book through the South Dakota Interlibrary Loan System. The book is 11" x 17" with a foldout for the steeple plan. It cost \$5 in 1852. A copy of the 1975 edition is for sale on Amazon for \$1,500 today.



Rev. James Lloyd Breck, a possible ancestor of Betty's, was largely responsible for bringing Upjohn's architectural style to the Midwest.